

determining a satellite constellation having a first coverage, the constellation including at least two desired satellites, wherein each of the desired satellites has a trajectory associated therewith and a relative [configuration] orbit within the satellite configuration;

determining a period of orbit for each of the desired satellites;

determining a time dependent coverage of [a] the satellite constellation based on the orbit period and the trajectory of each of the desired satellites;

determining a second coverage based on the time dependent coverage, which provides maximum coverage by the satellite constellation at the predetermined local times for the set of predetermined geographic locations;

determining a [determine the] tilted trajectory [of] for each of the desired satellites to reorient the satellite constellation without changing the relative orbit of the at least two desired satellites with respect to each other within the satellite constellation so as to obtain the [a] second coverage [based on the time dependent coverage, the second coverage providing maximum coverage at the predetermined local times for the set of predetermined geographic locations]; and

generating command signals for modifying the trajectory of each desired satellite based on the tilted trajectory